Cohesion and Coherence in Technical Translation: The Case of Demonstrative Reference

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This paper examines cohesion and coherence within the larger framework of an equivalence-relevant investigation based on a theoretically well-founded translation comparison and a highly refined translation corpus. Cohesion is analysed at the textual, more specifically at the sentential/supra-sentential, level taking due account of the underlying coherence operating at the text-in-context level. The research investigates and exemplifies the English demonstrative determiner/pronoun ‘this’ as a cohesive device of reference and its German potential equivalents, and indicates trends in translation solutions. The results of this analysis will show that coherence – established by the interaction of intended sense and informed inference – is upheld in the German TT by cohesive means which, though occasionally quite different from their ST counterparts, contribute toward achieving “equivalence in difference” (Jakobson [1959]1992) at the overall text-in-context level.

1. Introduction

Cohesion and coherence are defined differently in text linguistics (see, e.g., Schlorke 1983 for a brief overview) and translation studies (see, e.g., Vermeer 19841, Baker 1992). According to de Beaugrande and Dressler (1981), cohesion and coherence “are the most obvious standards of textuality” (op. cit.:113). Cohesion refers to the way in which the surface elements of a text, such as lexical or grammatical elements, hang together and display continuity (cf. also Halliday and Hasan 141995). Coherence refers to the way in which continuity of sense is established and upheld. According to de Beaugrande and Dressler (1981:84), “a text ‘makes sense’ because there is a CONTINUITY OF SENSES among [sic!] the knowledge activated by the expressions of the text”.

These two concepts are closely interrelated, because a well-motivated selection of cohesive devices will help establish coherence, which is maintained “by continual interaction of TEXT-PRESENTED KNOWLEDGE with PRIOR KNOWLEDGE OF THE WORLD” (de Beaugrande 1980:19). Consequently, Dressler (1998), referring to de Beaugrande and Dressler (1981), describes coherence as the way in which a text hangs together semantically, pragmatically and thematically and claims that the constitution of coherence is not text-immanent, but performed by inferencing. The latter aspect is of particular importance in scientific and technical discourse, where highly specialized texts may be lacking or poor or even defective in cohesive devices. If lacking or poor, this may be due to register constraints, such as compactness of expression brought about in English, e.g., by the frequent use of the non-
finite verb forms or compounding involving ellipsis and synonymy, and, if
defective, to a certain carelessness on the part of the author (for the defec-
tiveness of scientific and technical source texts see Schmitt 1987; Horn-Helf
1999). However, such texts may still be made coherent by relying on the
specialist readers’ domain knowledge or experience and their ability to draw
informed inferences (cf. Weissberg 1984). From the point of view of trans-
lation such texts are particularly challenging, because they require a sound
domain knowledge on the part of the translator, who may have to consult
experts in the field engaged in cutting-edge research to perform the neces-
sary inferencing as a bridging function and enable her/him to use the TL
register-bound cohesive and other devices to re-establish TT coherence.

The relevance of these two concepts in the translational context has
been discussed and described by various scholars and from different angles
(e.g., Blum-Kulka 1986, Hatim and Mason 1990, Baker 1992, and more
recently Gerzymisch-Arbogast 1999). In an equivalence-relevant investiga-
tion based on a proper delimitation of translation from other forms of text
production (Schreiber 1993), it may rightly be assumed that coherence, i.e.,
the set of conceptual relations underlying the surface text, would remain
constant in translation (Hatim and Mason 1990:195). However, the ways in
which this coherence is reflected on the textual surface, i.e., the cohesive
devices employed, may be quite different for reasons related, e.g., to speci-
fic languages, text types and genres. Coherence in the present research is
taken to mean intended sense, rather than “intended meaning” (Hatim and
Mason 1990:194) or “the realization(s) of the text’s meaning potential”
(Blum-Kulka 1986:23), since according to de Beaugrande and Dressler
(1981:84), meaning describes “the potential of a language expression” for
representing and relaying knowledge (“virtual meaning”), whereas sense
designates “the knowledge that actually is conveyed by expressions occur-
ing in a text”. They continue that “many expressions have several virtual
meanings, but under normal conditions, only one sense in a text.”

This aspect has direct implications for translation, because translators
do not translate isolated expressions, but expressions in texts-in-contexts,
which requires them to discover the intended sense of a particular expression
in a particular text-in-context. This is particularly important in instances in
which the textual surface may make it difficult to establish the intended
sense. It is this intended sense that has to be replicated and maintained in
translation, inter alia, by deploying cohesive devices which, as our research
shows, may differ considerably between languages. The use of TL cohesive
devices that are equivalent to their ST counterparts will help relay the in-
tended sense of the ST in the TL, so that TT coherence can be esta-
blished through interaction between textual knowledge/information and the TL expert reader’s domain knowledge, world knowledge and expe-
rience.

The investigation of cohesion and coherence is performed in our case
within the larger methodological framework of an equivalence-relevant
investigation based on a theoretically well-founded translation comparison
and a highly refined translation corpus (Krein-Kühle 1999, 2001, forth-
coming). Although aspects of cohesion and coherence may come into play and modify equivalence at the syntactic, lexical-semantic and terminological-phraseological levels (for an example see Krein-Kühle 2002:71-72), a more systematic study is necessary to investigate cohesion as a typical feature of the text level. This shows how equivalence relations operate there and identifies patterns in translation solutions, which may be put into use in the applied branches of the discipline. To this end, the demonstrative determiner/pronoun this and its potential equivalents will be analysed and discussed in the following sections as a feature of cohesion. For the purpose of this investigation, cohesion, which is analysed at the textual level, and coherence, which is understood as operating at the text-in-context level, i.e., in the realm of pragmatics, are considered to be closely linked. This means that cohesion is analysed by taking due account of the underlying coherence (Hatim 1998:265), a step which is necessary if the investigation is to yield equivalence-relevant findings.

2. The case of demonstrative determiner/pronoun this and its German potential equivalents

According to Halliday and Hasan (1995:57-76), demonstrative reference is basically “a form of verbal pointing” (op. cit.:57), i.e., the demonstratives have a deictic function. They have definite meaning, and “their reference depends on the context shared by speaker/writer and hearer/reader” (Quirk et al. 1995:6.40 ff.). They may be used in situational reference (reference to the extra-linguistic environment), anaphoric reference (reference to an earlier part of the text) and cataphoric reference (reference to a later part of the text)(cf. Quirk et al. 1995:6.40 ff.). The demonstrative determiner/pronoun this is of particular importance in this context, because it is the most common demonstrative in the corpus examined, so that statistically underpinned trends in translation solutions can be expected. Moreover, this high and somewhat unusual frequency may yield interesting shifts in translation for register reasons in the TT. An investigation of the demonstrative pronoun this, in particular, and its translation solutions is itself a worthwhile task in view of its intricate referential function (2.2.). The demonstrative this accounts for 71% of all demonstratives in the corpus, with the determiner making up 42% and the pronoun 29%. These two categories will be investigated in greater detail in what follows.

2.1. This used as demonstrative determiner and its German potential equivalents

The demonstrative this in the above function accounts for 42% of all demonstratives counted and is the most frequent demonstrative in the corpus. The demonstrative, which occurs as “modifier” (Halliday and Hasan 1995:58) within the nominal group, refers either to a concrete entity or to an abstract
phenomenon participating in the reported research. The demonstrative may be used in situational reference, i.e., it refers to something in the extra-linguistic context, e.g., *this report*, and anaphoric reference, i.e., it refers to a part mentioned earlier in the text, e.g., *this problem*. In the latter case, the noun modified by the determiner *this* may be an exact repetition of an antecedent noun/compound/nominal group (see example iii) below), an elliptic repetition, especially in the case of highly technical compounds, e.g., *raw coprocessing VGO* (‘vacuum gas oil’) – *this VGO*, a reduced, modified and/or differently worded repetition in the case of compounds occurring in the production of text, e.g., *another linear and much better correlation – this correlation*, or headings (see example ii) below), a co-textual synonym, e.g., *x (figure) BPCD* (‘barrel per calendar day’) – *this amount*, or a noun referring to a differently worded more comprehensive antecedent propositional content. Since there are not enough instances of the demonstrative determiner plus noun used in situational reference, e.g., *this report*, demonstratives in situational and anaphoric reference are dealt with together here, though the demonstrative in situational reference will be considered separately in the discussion of our findings. On the basis of a larger corpus containing more instances of situational reference a distinction between situational and anaphoric reference might yield more specific results, although there may be cases in which it is difficult to distinguish between the two. Also, depending on discourse complexity, anaphoric reference may have its intricacies, if, e.g., several engineering/chemical tests are mentioned synonymously with the nouns *studies* or *approach*, it may occasionally be difficult to establish referential clarity in instances such as *this study* or *this approach*.

The frequency in the translation solutions (100% basis) for this category is as follows:

i) German demonstrative determiners *dieser, diese, dieses* 63%

Example:

These results are typical of bubble column reactors of *this* type.
Die erzielten Ergebnisse sind für Blasensäulenreaktoren *dieser* Bauart typisch.

ii) German adjective (including participles in adjective function), definite article+adjective, preposition+article +adjective 17%

(An adverb may be intercalated between def. art. and adj., see below.)

Example:

[Feedstock preparation and characterization] (heading)
*This* area focussed on the coal part of the feed and how its treatment affects general process performance.
*Der hier angesprochene Themenkreis* bezog sich im wesentlichen auf den Kohleanteil des Einsatzmaterials und die Frage, welchen
Einfluß seine Aufbereitung auf die allgemeine Verfahrensleistung hat.

iii) German definite article (here: genitive) 5%

Example:
[A practical use of these models is shown in Fig. 10, which defines the allowable operating region...for pitch conversions...] Run...described in Table...is within this allowable operating region but is not at the optimum as shown in Fig. 10.
Der in Tabelle...beschriebene Versuchslauf...liegt innerhalb des zulässigen Betriebsbereichs, jedoch nicht im Optimum, wie aus Bild 10 hervorgeht.

iv) Others 15%
such as: adverbial phrasing (see example below), adverbs, 1:0-correspondences due to redundancy considerations.

Example:
A related study on the detailed characterization of distillate fractions by advanced NMR techniques was summarized earlier in this report...
Über eine damit zusammenhängende Untersuchung bezüglich einer detaillierten Charakterisierung von Destillatfraktionen mit Hilfe moderner NMR-Verfahren wurde weiter oben zusammenfassend berichtet...

The above figures favour a trend towards German demonstrative determiners (63%) in the search for equivalence at the textual level. Like the English determiner, the German determiner helps the reader reidentify and refocus a piece of knowledge introduced earlier in the text. The nouns modified by the German determiner may be exact, modified or differently formulated and/or co-textually synonymous repetitions of the antecedent noun/compound/nominal group, or refocus a differently formulated more comprehensive propositional content (cf. Graefen 1997:218-220). However, it is interesting to note that in as many as 37% of the cases a range of translation solutions may contribute to equivalence at this level, such as adjectives, definite articles+adjectives, adverbial expressions, 1:0-correspondences and other solutions. This shows that cohesion in the TT may be established in different ways as compared with the ST by having recourse to the above linguistic means. In translating this demonstrative, therefore, the translator has to be aware of the variety of potential translation solutions, the actual choice depending on semantic considerations in a specific co-text/context involving, e.g., the need to use an adjective in the TT with a view to emphasizing the deictic function, or on pragmatic considerations, such as those of register, with a view to avoiding excessive and/or monotonous use of the demonstrative determiner in the TT, or to establishing greater referential clarity. Use of one of the above solutions may also depend on how other demon-
stratives in the same sentential co-text have been translated (see example under i), in which the plural form *these* is rendered by the definite article+adjective).

The established variety of translation solutions (the 37%) may be regarded as an apt reflection of the difference between the use of the English and the German demonstrative. Like the English article, the demonstrative, too, may be considered to be semantically stronger than its German counterpart (cf. Franck 1980:97-99), so that it may be necessary in translation to place an emphasis at a particular text location by deploying other linguistic means, other pronouns, adjectives or adverbs. Hence, such cases of explicitation are due to this difference in the semantic potential between the two languages involved, rather than proof of the *explicitation hypothesis* (Blum-Kulka 1986, Baker 1996:176-177, Laviosa 2002:51-54). As mentioned before, pragmatic aspects, too, such as register considerations, may come to the fore and trigger the use of other linguistic means, such as adverbial phrasing operating as cohesive devices in the TL, which may lead to instances of implicitation, too, in the TT (see example under iv) above). Shifts in both explicitness and implicitness may occur in the process of translation for systemic, register and other translational reasons (cf. Salama-Carr 2001) and it is the motivation behind the explicitation rather than the explicitation itself which is of relevance in the translational context.

This research shows that the translator has to examine thoroughly each occurrence of demonstrative determiner to be able to select a TL equivalent. Context may have a ‘levelling effect’ (“nivellierende Wirkung”, Franck 1980:99), and there may be no need to explicatate the systemic difference in the semantic potential to establish cohesion (see translation solutions under i) accounting for 63%). Other textual locations may need such an explicitation for the same reason. It is the interplay of the above linguistic means, some of which are quite different from their English demonstrative counterparts, that help establish not only cohesion, but also coherence or continuity of sense in the TT.

In view of the results for the demonstrative in situational reference, e.g., *this report*, there is a trend towards using the German definite article+adjective, viz. *der vorliegende Bericht*, (but see the above example under iv)) to establish referential clarity. This result tends to correlate with some of the findings of German monolingual research (Graefen 1997: 216-223), where it was found that a definite article+adjective phrasing may often be used instead of the demonstrative determiner to counteract referential misunderstanding in situational reference, e.g., “die vorliegende Untersuchung” (op. cit.: 218). However, as our results have shown, this translation solution may also occur in the case of anaphoric reference for various reasons (see example under ii) above).

On the basis of this research, we may also rightly assume that a similar variety of translation solutions would occur in an investigation of the plural form *these* (see example under i) above).
2.2. *This* used as demonstrative pronoun and its German potential equivalents

The demonstrative *this* in the above function accounts for 29% of all demonstratives counted and is the second most frequent demonstrative in the corpus. It occurs in subject position in a pro-form function and is used either for anaphoric nominal reference (32%) or anaphoric textual reference (68%) (100% basis), i.e., in the first case the antecedent is a single noun/compound noun occasionally plus adjective or a noun phrase, in the second case the antecedent may be the propositional content of a larger part of discourse, e.g., a complex clause, sentence or occasionally an entire section of discourse or parts of these (cf. also Quirk et al. 1995:6.44; Halliday and Hasan 1995:66 ff.). These two types of reference are dealt with together here, but – as the results will show – may have to be given separate consideration for equivalence reasons when investigated on the basis of a more comprehensive corpus. It is important to note that the relatively high frequency of *this* is somewhat unusual and apart from being motivated by the need for economy of expression, points to a certain stylistic carelessness on the part of the author involving instances of referential vagueness, i.e., it is not always unequivocally clear what specific antecedent is referred to by *this*. In such instances the establishment of referential clarity in the TT may require recourse to domain knowledge involving expert advice. Such cases of stylistic carelessness are not atypical in the scientific and technical field, where researchers are pressed for time to present and publish their latest results which may be considered more important than the language describing them. How such an instance of stylistic roughness involving an occasional referential vagueness can be counteracted in translation and how overall textual equivalence be achieved is reflected in the following result. The frequency in the translation solutions (100% basis) for the category examined is as follows:

i) Use of pronominal (prepositional) adverbs and other adverbs 43%
(Duden vol. 4, 1995:626 ff.)
such as: *damit, hiermit, daraus, hierbei*, etc.

Example:
[Arrangements were made with...to supply to...drums of dried...subbituminous coal...taken from...the exit stream...of...]

*This* eliminated the costly process of preparing batches of dried coal under separate contract.

*Damit* wurde das kostspielige Verfahren zur Herstellung von Trockenkohle-Chargen unter einem weiteren Vertrag umgangen.

ii) Shift from demonstrative pronoun to demonstrative determiner and introduction of a noun/subject 28.5%
Example:
[In general, with the...process the heteroatom content of the distillables is a function of the heteroatom content of the coal-oil combination used as feed.]

*This* is especially evident when comparing the sulphur contents of the distillables in Fig. 4...

_Dieser Zusammenhang_ wird ganz besonders beim Vergleich der Schwefelgehalte der destillierbaren Anteile in Bild 4 deutlich.

iii) Others 28.5%
such as: 1:0-correspondences triggered by redundancy considerations and use of different cohesive devices in the TT, neuter _dies_, demonstrative pronoun, relative pronoun _was_, etc.

This category contains a few cases in which _this_ was inappropriately used in the ST and improved upon in the translation, see example below:

Example:
[Processing the same coal sample dried by the different methods at a relatively high severity of ...°C and a nominal WHSV of...resulted in no significant difference in almost all measured process variables.] _This_ included: coal and pitch conversions, distillables...

Bei Verarbeitung der gleichen jedoch auf unterschiedliche Art getrockneten Kohleprobe unter relativ scharfen Verfahrensbedingungen von...°C und einem WHSV-Nennwert von...ergaben sich in bezug auf fast alle Prozeßvariablen, _wie z. B._ Kohle- und Pechumsätze, destillierbare Anteile...keine nennenswerten Unterschiede.

The above results show a varied pattern of translation solutions for the demonstrative pronoun under investigation. Pronominal and other adverbs, such as temporal adverbs, e.g., _This_ was followed by – _Anschließend_, account for 43% of the translation solutions. Pronominal adverbs belong to the relational adverbs and, therefore, like the English pronoun _this_ have a pro-form function and may be used in anaphoric reference, with the antecedent being a noun, noun phrase or entire sentence (Duden vol. 4, '1995:628). The use of these pronominal adverbs is particularly frequent in the case of English _this_ referring to the propositional content of a more complex clause, sentence, several sentences or parts of these, though also other solutions occur, e.g., translation solution ii) or relative pronoun _was_, involving the integration of one sentence into the foregoing one. The frequent use of pronominal adverbs established above tends to agree with monolingual research (Rehbein 1995) and more recent translational research (Baumgarten et al. 2001:34; Böttger and Probst 2001:11 ff.), which found that these adverbs, referred to by Rehbein (1995) as “zusammengesetzte Verweiswörter”, are a common feature of German discourse and contribute to cohesion by refocussing and condensing knowledge.
A shift from demonstrative pronoun to demonstrative determiner and the introduction of a noun/subject in German occurs in 28.5% of the cases. This translation solution, which tends to correlate with the findings of German monolingual research (Graefen 1997:219), suggests that a noun helping the reader reidentify and refocus an antecedent noun or “propositional content which has already been mentally processed, but is formulated differently” (Graefen 1997:219, my translation), may be required to establish cohesion in the TT. In most cases, this noun is an abstract noun, such as Zusammenhang, Sachverhalt, Problematik, Aspekt, which brings about a naming and refocussing of the content/ideas in the English antecedent by abstraction. This noun then becomes the thematic subject of the following sentence. The use of these nouns helps refocus knowledge and, at the same time, contributes to formality of expression with nominalization and abstraction in German, which is known to exhibit a higher, i.e., more formal, level of discourse formality than English, in the scientific and technical context (cf. Gerzymisch-Arbogast 1993). This shift in cohesion, which may be interpreted as an instance of a certain explicitation, is register-induced and thus contributes to overall textual equivalence.

The translation solutions under iii), which account for another 28.5%, include 1:0-correspondences triggered by redundancy considerations, involving shifts in implicitness, and the use of further different cohesive devices in the TT, such as the neuter dies, demonstrative pronoun, relative pronoun was, etc. This category also contains cases in which this was inappropriately used in the ST and improved upon in the translation. In the example under iii), this is improperly used for these referring to all measured process variables. In German, cohesion is established by integrating the second sentence into the first by wie z. B., functioning as a connective and explanatory expression.

The German 1:1-correspondence, i.e., the neuter dies, which may also refer to an entire sentence (Duden vol. 4, ’1995:562) and/or more complex propositional content, only occurs once in the TT as a potential equivalent for this. In this case, reference to a specific antecedent is left as vague as in the original. Since nominal dies may be difficult to refer to a specific antecedent, it may be expected to be used much less frequently (cf. Graefen 1997:220-223) in scientific and technical texts, owing to the need for greater precision in German in this kind of discourse.

It was also found that the variety in translation solutions is most pronounced in the case of this referring to a single noun/compound noun or noun phrase, with pronominal adverbs accounting for 11%, demonstrative determiner+noun for 33% and other solutions for as many as 56% (100% basis), which reflect, above all, pragmatic considerations, such as register and domain knowledge to establish both cohesion and coherence in the TT.

The findings of this analysis suggest that in the case of this used as demonstrative pronoun in subject function, there is a host of different translation solutions available, one of which must be carefully chosen taking due account of semantic and pragmatic aspects to establish cohesion in the TT. This specific translation solution is not chosen at random; the selection may
be motivated by considerations of domain knowledge and register, which serve, e.g., to improve on a carelessly used instance of *this*, to establish greater referential clarity or to control and compensate the ST’s excessive use of this pronoun in translation by deploying those TL cohesive devices that may be considered potential equivalents for the SL item in specific co-textual and contextual circumstances. It is the interplay of the linguistic devices found that establishes TT cohesion which, in its turn, contributes towards preserving the intended sense and the informed inference, so that coherence may be deemed to have been established and upheld, and equivalence at the overall text-in-context level achieved.

3. Conclusion

The investigation of *this* used in demonstrative reference has revealed a variety in translation solutions, all of which contribute to cohesion and coherence and, hence, to the overall textual equivalence of the TT. In the case of *this* used as demonstrative determiner, the German demonstratives account for 63%, while the remaining 37% involve a variety of solutions, such as the use of adjectives, definite article+adjective, and other solutions, including 1:0-correspondences. It should be noted that the shifts reflected in the 37% of translation solutions may be mostly due to systemic differences, i.e., the stronger semantic potential of the English demonstrative as compared with its German counterpart. Whether this difference has to be made explicit or not is influenced by semantic and pragmatic considerations. Such considerations may involve the need to use an adjective in the TT with a view to emphasizing the deictic function, the need to avoid tedious repetition in the TT or establish greater referential clarity. On the basis of this result, it may be hypothesized that a similar trend in translation solutions may be expected for the demonstrative determiner *these*. Certainly, this hypothesis would have to be underpinned on the basis of a larger corpus. Also, the remaining determiners *that* and *those* would be an interesting subject of further research in this context. On the basis of a larger corpus, further categorial distinctions may yield more specific results.

In the case of *this* used as demonstrative pronoun there is a host of translation solutions. German pronominal adverbs, which have a similar referential function as their English counterpart, account for 43%. A shift from demonstrative pronoun to demonstrative determiner along with the introduction of a noun/subject and the translation solutions under ‘Others’ account for 28.5% each. The shifts in translation may be due to semantic, but, above all, to pragmatic aspects, such as domain and register considerations involving the need to establish greater referential clarity, compensate the ST’s excessive use of this pronoun, and/or bring about the requisite level of formality and precision in the TT. Also, they include instances in which an inappropriate use of the pronoun is corrected via translation, a step which may involve further shifts. Redundancy considerations may come into play and are reflected, above all, in 1:0-correspondences, but, occasionally, also in the integration of one sentence into the foregoing one. As in the case of
the translation solutions for the determiner, the potential equivalents established for the demonstrative pronoun have to be selected in each case by taking due account of co-textual and contextual considerations. While there is a trend towards the use of pronominal adverbs for the English this referring to the propositional content of more complex clausal, sentential or sectional antecedents or parts of these, the widest variety in translation solutions can be established in the case of this used in anaphoric nominal reference, which suggests a need for separate consideration of this category on the basis of a larger corpus, involving further sub-categorization.

As this research has shown, cohesion and coherence in the translational/equivalence-related field are worthy of special study. More text-in-context-based investigations of demonstrative reference – and other cohesive devices – in scientific and technical discourse would be a fruitful area of further research. Such research would not only help underpin the results of this investigation (if based on a similar text genre and type), but also allow us to gain more specific insights into the way cohesion and coherence are established in source texts and their translations in a variety of scientific and technical text genres and types.

To sum up the result of this analysis it can be stated that coherence – established by the interaction of intended sense and informed inference – is maintained and upheld in the German TT by cohesive means which, though occasionally quite different from their ST counterparts, contribute toward achieving “equivalence in difference” (Jakobson [1959]1992) at the overall text-in-context level.

Bibliography


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1 Vermeer (1984) (and Kußmaul 1986, too, following Vermeer 1984) uses “Kohärenz” or “intertextuelle Kohärenz” as a substitute for ‘Äquivalenz’, in a somewhat debatable use of the concept, since it is equivalence that refers to the special relationship between a ST and a TT and to the process and the product of a language transfer, whereas coherence as a standard of textuality (de Beaugrande and Dressler 1981) is a property of a text-in-context within one single language.

2 The present corpus, which deals with cutting-edge research in a sub-field of coal chemistry, is marked as ‘classified documentation’, so that some omissions (indicated by three dots) have occasionally to be made in exemplification, though these do not impair the general argument. Also, for reasons of confidentiality, the ST antecedent cannot always be given; otherwise it is indicated in square brackets.

3 A good half of the *this* pronouns investigated here occur in ‘secondary subjectification’ (‘sekundärer Subjektivierung’, Rohdenburg 1974), a circumstance which imposes certain syntactic-semantic constraints and has certainly influenced the results (Krein-Kühle 2001, forthcoming).

4 Of course, there may be instances of deliberate vagueness, e.g., in cases where researchers do not want to disclose too much of their findings for confidentiality/proprietary reasons, and in such instances referential vagueness may be transferred into the TT.